PAGE 02/05

Claims:

1**-**5. (Canceled)

248-813-1211

- б. (Previously presented) The system of Claim 16, wherein said mat material further comprises a type of material selected from the group consisting of woven, mesh like, fibrous, cloth like, paper like, and combinations comprising at least one of the foregoing types of materials.
 - 7. (Canceled)
- 8. (Previously presented) The system of Claim 16, wherein said plurality of layers of material further are held together using a binder, wherein said binder further comprises a binder selected from the group consisting of a sealing agent, an adhesive, a ceramic substance, and combinations comprising at least one of the foregoing binders.
 - 9. (Canceled)
- 10. (Previously presented) The system of Claim 16, wherein said reflective surface further comprises a coating, wherein said coating further comprises a white opaque material.
 - 11-15. (Canceled)
 - 16. (Currently amended) A fuel reformer system, comprising: housing having an inlet and an outlet;
- a mat material fluidly coupled to and downstream of said inlet, said mat material comprising a plurality of layers of a ceramic fibrous material and having a reflective surface facing the inlet that provides a mixing zone fluidly coupled to and downstream of said mat material; and

PAGE

a reforming zone downstream of said mat material and mixing zone, comprising a reformer catalyst substrate.

17-19. (Cancelled)